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NEWS 3 AUG 06 FSTA enhanced with new thesaurus edition
NEWS 4 AUG 13 CA/CAplus enhanced with additional kind codes for granted patents
NEWS 5 AUG 20 CA/CAplus enhanced with CAS indexing in pre-1907 records
NEWS 6 AUG 27 Full-text patent databases enhanced with predefined patent family display formats from INPADOCDB
NEWS 7 AUG 27 USPATOLD now available on STN
NEWS 8 AUG 28 CAS REGISTRY enhanced with additional experimental spectral property data
NEWS 9 SEP 07 STN AnaVist, Version 2.0, now available with Derwent World Patents Index
NEWS 10 SEP 13 FORIS renamed to SOFIS
NEWS 11 SEP 13 INPADOCDB enhanced with monthly SDI frequency
NEWS 12 SEP 17 CA/CAplus enhanced with printed CA page images from 1967-1998
NEWS 13 SEP 17 CAplus coverage extended to include traditional medicine patents
NEWS 14 SEP 24 EMBASE, EMBAL, and LEMBASE reloaded with enhancements
NEWS 15 OCT 02 CA/CAplus enhanced with pre-1907 records from Chemisches Zentralblatt
NEWS 16 OCT 19 BEILSTEIN updated with new compounds
NEWS 17 NOV 15 Derwent Indian patent publication number format enhanced
NEWS 18 NOV 19 WPIX enhanced with XML display format
NEWS 19 NOV 30 ICSD reloaded with enhancements
NEWS 20 DEC 04 LINPADOCDB now available on STN
NEWS 21 DEC 14 BEILSTEIN pricing structure to change
NEWS 22 DEC 17 USPATOLD added to additional database clusters
NEWS 23 DEC 17 IMSDRUGCONF removed from database clusters and STN
NEWS 24 DEC 17 DGENE now includes more than 10 million sequences
NEWS 25 DEC 17 TOXCENTER enhanced with 2008 MeSH vocabulary in MEDLINE segment
NEWS 26 DEC 17 MEDLINE and LMEDLINE updated with 2008 MeSH vocabulary
NEWS 27 DEC 17 CA/CAplus enhanced with new custom IPC display formats
NEWS 28 DEC 17 STN Viewer enhanced with full-text patent content from USPATOLD
NEWS 29 JAN 02 STN pricing information for 2008 now available
NEWS 30 JAN 16 CAS patent coverage enhanced to include exemplified prophetic substances
NEWS 31 JAN 28 USPATFULL, USPAT2, and USPATOLD enhanced with new custom IPC display formats
NEWS 32 JAN 28 MARPAT searching enhanced
NEWS 33 JAN 28 USGENE now provides USPTO sequence data within 3 days of publication
NEWS 34 JAN 28 TOXCENTER enhanced with reloaded MEDLINE segment

NEWS 35 JAN 28 MEDLINE and LMEDLINE reloaded with enhancements
NEWS 36 FEB 08 STN Express, Version 8.3, now available

NEWS EXPRESS FEBRUARY 08 CURRENT WINDOWS VERSION IS V8.3,
AND CURRENT DISCOVER FILE IS DATED 24 JANUARY 2008

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COST IN U.S. DOLLARS
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0.21
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FILE 'REGISTRY' ENTERED AT 08:21:28 ON 12 FEB 2008
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STRUCTURE FILE UPDATES: 11 FEB 2008 HIGHEST RN 1002789-56-1
DICTIONARY FILE UPDATES: 11 FEB 2008 HIGHEST RN 1002789-56-1

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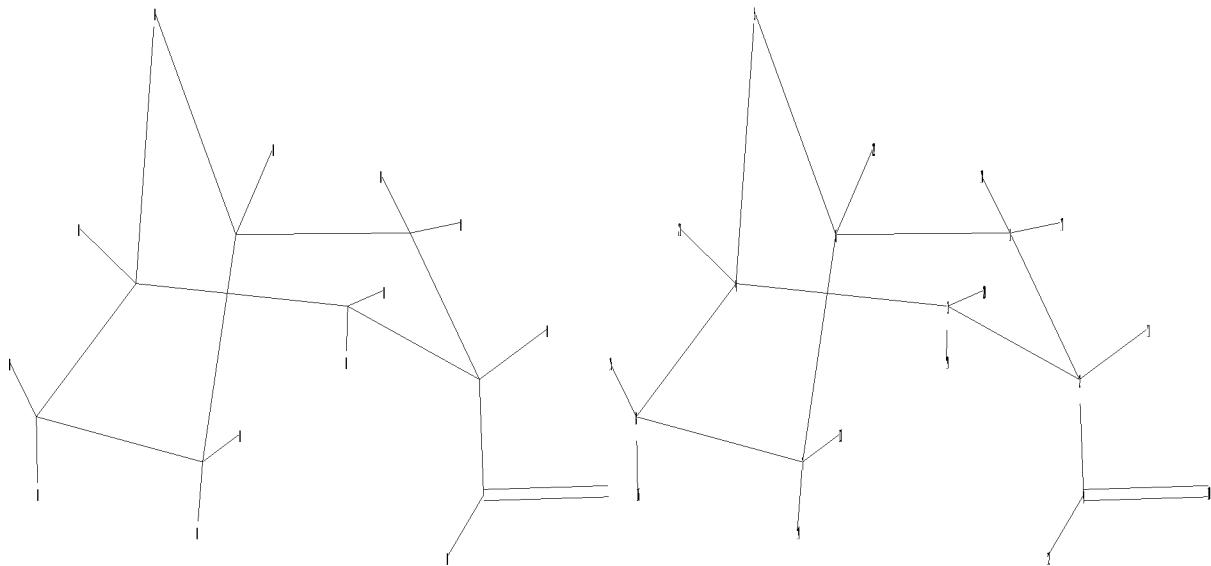
TSCA INFORMATION NOW CURRENT THROUGH June 29, 2007

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<http://www.cas.org/support/stngen/stndoc/properties.html>

=>
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chain nodes :
 9 10 11 12 13 14 15 16 17 18 19 20 21 22
 ring nodes :
 1 2 3 4 5 6 7 8
 chain bonds :
 1-17 1-18 2-9 2-11 3-19 3-20 4-21 6-22 7-13 7-14 8-15 8-16 9-10 9-12
 ring bonds :
 1-2 1-6 2-3 3-4 4-5 4-8 5-6 6-7 7-8
 exact/norm bonds :
 1-2 1-6 2-3 3-4 4-5 5-6
 exact bonds :
 1-17 1-18 2-9 2-11 3-19 3-20 4-8 4-21 6-7 6-22 7-8 7-13 7-14 8-15
 8-16 9-10 9-12
 isolated ring systems :
 containing 1 :

Match level :
 1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:CLASS 10:CLASS
 11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS 18:CLASS
 19:CLASS 20:CLASS 21:CLASS 22:CLASS

L1 STRUCTURE UPLOADED

=> s 11
 SAMPLE SEARCH INITIATED 08:21:42 FILE 'REGISTRY'
 SAMPLE SCREEN SEARCH COMPLETED - 89 TO ITERATE

100.0% PROCESSED 89 ITERATIONS
 SEARCH TIME: 00.00.01

5 ANSWERS

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 1214 TO 2346
PROJECTED ANSWERS: 5 TO 234

L2 5 SEA SSS SAM L1

=> s 11 full
FULL SEARCH INITIATED 08:21:48 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 1821 TO ITERATE

100.0% PROCESSED 1821 ITERATIONS 116 ANSWERS
SEARCH TIME: 00.00.01

L3 116 SEA SSS FUL L1

=> file caplus
COST IN U.S. DOLLARS SINCE FILE TOTAL
FULL ESTIMATED COST ENTRY SESSION
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FILE 'CAPLUS' ENTERED AT 08:21:53 ON 12 FEB 2008
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FILE COVERS 1907 - 12 Feb 2008 VOL 148 ISS 7
FILE LAST UPDATED: 11 Feb 2008 (20080211/ED)

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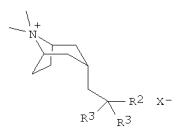
=> s 13 full
L4 13 L3

=> d ibib abs hitstr tot

L4 ANSWER 1 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2007146107 CAPLUS
 DOCUMENT NUMBER: 146229203
 TITLE: Preparation of azoniabicyclooctanes as M3 muscarinic acetylcholine receptor antagonists.
 INVENTOR(S): Busch-Petersen, Jakob; Laine, Dramane Ibrahim; Palovich, Michael R.; Davis, Roderick S.; Fu, Wei; Xie, Haibo
 PATENT ASSIGNEE(S): Glaxo Group Limited, UK
 SOURCE: PCT Int. Appl., 42pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

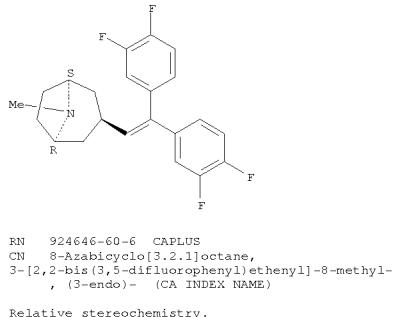
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007016639	A2	20070208	WO 2006-US30153	20060802
WO 2007016639	A3	20070705		
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RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CP, CG, CI, CM, GA, GN, QD, GW, ML, MR, NE, SN, TD, TG, BW, GH, OM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OR				
PRIORITY APPLN. INFO.: US 2005-704579P			P 20050802	

OTHER SOURCE(S): MARPAT 146:229203
 GI



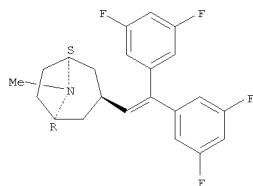
AB Title compds. [I; R1, R2 = (substituted) Ph, thiienyl, pyridyl, PhCH2, pyrimidinyl, thiazolyl, isothiazolyl, cycloalkyl, etc.; R3 = H, OH; X = physiol. acceptable anion], were prepared for treatment of chronic obstructive pulmonary disease, chronic bronchitis, asthma, chronic respiratory obstruction, pulmonary fibrosis, emphysema, and allergic rhinitis (data not shown). Thus, 2-[(3-endo)-8-methyl-8-azabicyclo[3.2.1]oct-3-yl]-1-1-bis(3-methyl-2-thienyl)ethanol (preparation given) was treated with MeBr in *tert*-Bu Me ether to give 61% (3-endo)-3-[2-hydroxy-2-bis(3-methyl-2-thienyl)ethyl]-8,8-dimethyl-8-azoniabicyclo[3.2.1]octane bromide.

L4 ANSWER 1 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



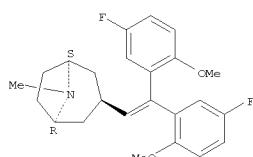
RN 924646-60-6 CAPLUS
 CN 8-Azabicyclo[3.2.1]octane, 3-[2,2-bis(3,4-difluorophenyl)ethenyl]-8-methyl-, (3-endo)- (CA INDEX NAME)

Relative stereochemistry.



RN 924646-62-8 CAPLUS
 CN 8-Azabicyclo[3.2.1]octane, 3-[2,2-bis(5-fluoro-2-methoxyphenyl)ethenyl]-8-methyl-, (3-endo)- (CA INDEX NAME)

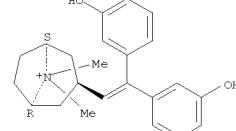
Relative stereochemistry.



L4 ANSWER 1 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
 IT 924646-34-4P 924646-56-0P 924646-58-2P
 924646-60-6P 924646-62-8P 924646-66-2P
 924646-84-4P 924646-85-5P 924646-86-6P
 R1: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation of azoniabicyclooctanes as M3 muscarinic acetylcholine receptor antagonists)

RN 924646-34-4 CAPLUS
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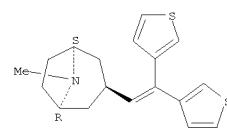
Relative stereochemistry.



● Br-

RN 924646-56-0 CAPLUS
 CN 8-Azabicyclo[3.2.1]octane, 3-(2,2-di-3-thienylethenyl)-8-methyl-, (3-exo)- (CA INDEX NAME)

Relative stereochemistry.



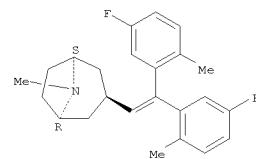
RN 924646-58-2 CAPLUS
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Relative stereochemistry.

L4 ANSWER 1 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

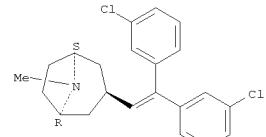
RN 924646-66-2 CAPLUS
 CN 8-Azabicyclo[3.2.1]octane, 3-[2,2-bis(5-fluoro-2-methylphenyl)ethenyl]-8-methyl-, (3-exo)- (CA INDEX NAME)

Relative stereochemistry.



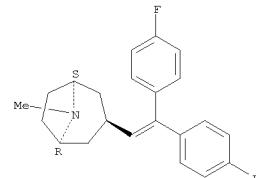
RN 924646-84-4 CAPLUS
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Relative stereochemistry.



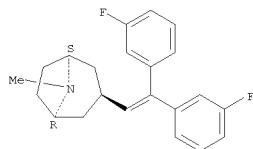
RN 924646-85-5 CAPLUS
 CN 8-Azabicyclo[3.2.1]octane, 3-[2,2-bis(4-fluorophenyl)ethenyl]-8-methyl-, (3-exo)- (CA INDEX NAME)

Relative stereochemistry.



RN 924646-86-6 CAPLUS
 CN 8-Azabicyclo[3.2.1]octane, 3-[2,2-bis(3-fluorophenyl)ethenyl]-8-methyl-, (3-endo)- (CA INDEX NAME)

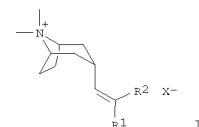
Relative stereochemistry.



L4 ANSWER 2 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
 ACCESS NUMBER: 2007144089 CAPLUS
 DOCUMENT NUMBER: 146:229182
 TITLE: Preparation of 3-(arylethenyl)-8,8-dimethyl-8-azoniarabicyclo[3.3.1]octanes as M3 muscarinic acetylcholine receptor antagonists.
 INVENTOR(S): Buzch-Petersen, Jakob; Laine, Dramane Ibrahim; Palovich, Michael R.; Davis, Roderick S.; Fu, Wei; Xie, Haibo
 PATENT ASSIGNEE(S): Glaxo Group Limited, UK
 SOURCE: PCT Int. Appl., 35pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007016650	A2	20070208	WO 2006-US30218	20060802
WO 2007016650	A3	20070531		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LS, LT, LU, LV, LY, MA, MD, MG, MK, MW, MW, MN, MZ, NA, NC, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, US, VC, VN, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BP, BJ, CP, CO, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KP, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, AM, AZ, BY, RG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA		US 2005-704578P	P 20050802	

PRIORITY APPLN. INFO.: MARPAT 146:229182
 OTHER SOURCE(S): GI



AB Title compds. [I]; R1, R2 = (substituted) Ph, thiienyl, pyridyl, PhCH2, or pyrimidinyl, thiazolyl, isothiazolyl, cycloalkyl, etc.; X = pharmaceutically acceptable counterion, were prepared for treatment of COPD, chronic bronchitis, asthma, chronic respiratory obstruction, pulmonary fibrosis, emphysema, and allergic rhinitis (no data). Thus, (endo)-3-[2,2-bis(3-hydroxyphenyl)ethenyl]-8,8-dimethyl-8-azoniarabicyclo[3.3.1]octane bromide was prepared from tri-*Me*

IT 924646-34-4P 924646-35-5P 924646-36-6P
 924646-37-7P 924646-38-8P 924646-39-9P
 924646-40-2P 924646-41-3P 924646-42-4P
 924646-43-5P 924646-44-6P 924646-45-7P
 924646-46-8P 924646-47-9P 924646-48-0P
 924646-49-1P 924646-50-4P 924646-51-5P

KL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

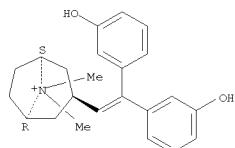
(Claimed compound; preparation of

arylethenyl dimethylazoniarabicyclooctanes as

M3 muscarinic acetylcholine receptor antagonists)

RN 924646-34-4 CAPLUS
 CN 8-Azoniarabicyclo[3.3.1]octane, 3-[2,2-bis(3-hydroxyphenyl)ethenyl]-8,8-dimethyl-, bromide (1:1), (3-endo)- (CA INDEX NAME)

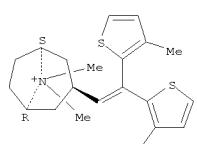
Relative stereochemistry.



● Br⁻

RN 924646-35-5 CAPLUS
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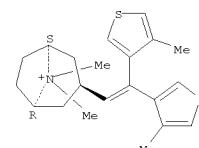
Relative stereochemistry.



● Br⁻

RN 924646-36-6 CAPLUS
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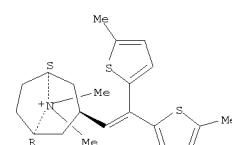
Relative stereochemistry.



● Br⁻

RN 924646-37-7 CAPLUS
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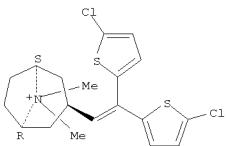
Relative stereochemistry.



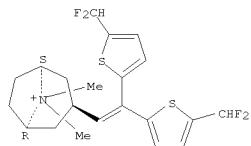
● Br⁻

RN 924646-38-8 CAPLUS
 CN 8-Azoniarabicyclo[3.3.1]octane, 3-[2,2-bis(5-chloro-2-thienyl)ethenyl]-8,8-dimethyl-, bromide (1:1), (3-endo)- (CA INDEX NAME)

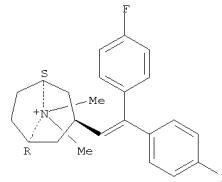
Relative stereochemistry.

● Br⁻

RN 924646-39-9 CAPLUS
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 Relative stereochemistry.

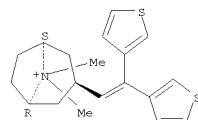
● Br⁻

RN 924646-40-2 CAPLUS
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 Relative stereochemistry.

● I⁻

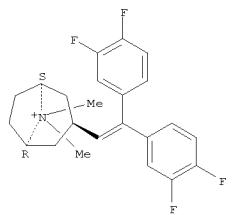
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Relative stereochemistry.

● I⁻

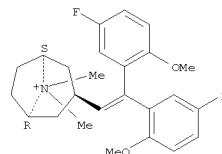
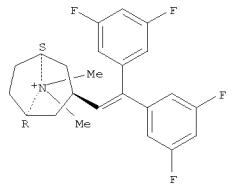
RN 924646-42-4 CAPLUS
 CN 8-Azoniabicyclo[3.2.1]octane, 3-[2,2-bis(3,4-difluorophenyl)ethenyl]-8,8-dimethyl-, bromide (1:1), (3-exo)- (CA INDEX NAME)

Relative stereochemistry.

● Br⁻

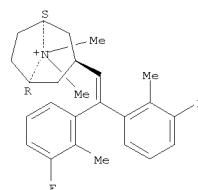
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Relative stereochemistry.

● Br⁻

RN 924646-45-7 CAPLUS
 CN 8-Azoniabicyclo[3.2.1]octane, 3-[2,2-bis(3-fluoro-2-methylphenyl)ethenyl]-8,8-dimethyl-, bromide (1:1), (3-exo)- (CA INDEX NAME)

Relative stereochemistry.

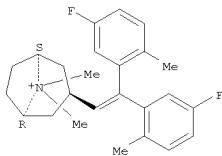
● Br⁻

RN 924646-44-6 CAPLUS
 CN 8-Azoniabicyclo[3.2.1]octane, 3-[2,2-bis(5-fluoro-2-methoxyphenyl)ethenyl]-8,8-dimethyl-, bromide (1:1), (3-endo)- (CA INDEX NAME)

Relative stereochemistry.

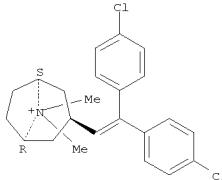
RN 924646-46-8 CAPLUS
 CN 8-Azoniabicyclo[3.2.1]octane, 3-[2,2-bis(5-fluoro-2-methoxyphenyl)ethenyl]-8,8-dimethyl-, iodide (1:1), (3-exo)- (CA INDEX NAME)

Relative stereochemistry.

● I⁻

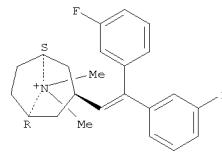
RN 924646-47-9 CAPLUS
 CN 8-Azoniabicyclo[3.2.1]octane, 3-[2,2-bis(4-chlorophenyl)ethenyl]-8,8-dimethyl-, iodide (1:1), (3-endo)- (CA INDEX NAME)

Relative stereochemistry.

● I⁻

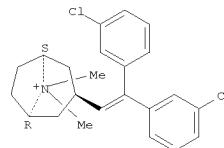
RN 924646-48-0 CAPLUS
 CN 8-Azoniabicyclo[3.2.1]octane, 3-[2,2-bis(3-fluorophenyl)ethenyl]-8,8-dimethyl-, iodide (1:1), (3-endo)- (CA INDEX NAME)

Relative stereochemistry.

● I⁻

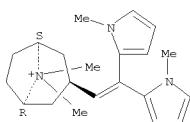
RN 924646-49-1 CAPLUS
 CN 8-Azoniabicyclo[3.2.1]octane, 3-[2,2-bis(3-chlorophenyl)ethenyl]-8,8-dimethyl-, iodide (1:1), (3-endo)- (CA INDEX NAME)

Relative stereochemistry.

● I⁻

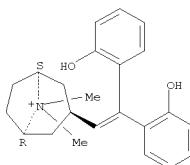
RN 924646-50-4 CAPLUS
 CN 8-Azoniabicyclo[3.2.1]octane, 3-[2,2-bis(1-methyl-1H-pyrrol-2-yl)ethenyl]-8,8-dimethyl-, bromide (1:1), (3-endo)- (CA INDEX NAME)

Relative stereochemistry.

● Br⁻

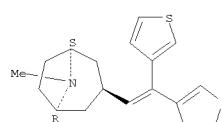
RN 924646-51-5 CAPLUS
 CN 8-Azoniabicyclo[3.2.1]octane, 3-[2,2-bis(2-hydroxyphenyl)ethenyl]-8,8-dimethyl-, bromide (1:1), (3-endo)- (CA INDEX NAME)

Relative stereochemistry.

● Br⁻

IT 924646-56-0P 924646-58-2P 924646-60-6P
 924646-62-8P 924646-64-0P 924646-66-2P
 924646-83-3P 924646-84-4P 924646-85-5P
 924646-86-6P 924646-87-7P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation of arylethenyldimethylazoniabicyclooctanes as M3 muscarinic acetylcholine receptor antagonists)
 RN 924646-56-0 CAPLUS
 CN 8-Azabicyclo[3.2.1]octane, 3-(2,2-di-3-thienylethenyl)-8-methyl-, (3-exo)- (CA INDEX NAME)

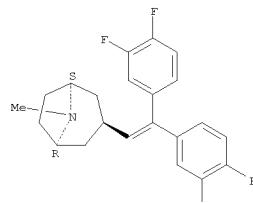
Relative stereochemistry.



Relative stereochemistry.

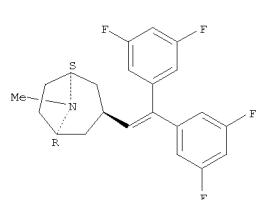
RN 924646-58-2 CAPLUS
 CN 8-Azabicyclo[3.2.1]octane, 3-[2,2-bis(3,5-difluorophenyl)ethenyl]-8-methyl-, (3-endo)- (CA INDEX NAME)

Relative stereochemistry.



RN 924646-60-6 CAPLUS
 CN 8-Azabicyclo[3.2.1]octane, 3-[2,2-bis(3,5-difluorophenyl)ethenyl]-8-methyl-, (3-exo)- (CA INDEX NAME)

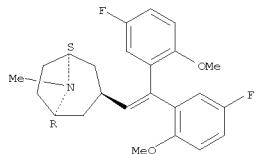
Relative stereochemistry.



RN 924646-62-8 CAPLUS

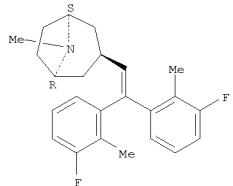
CN 8-Azabicyclo[3.2.1]octane,
3-[2,2-bis(5-fluoro-2-methoxyphenyl)ethenyl]-8-methyl-, (3-endo)- (CA INDEX NAME)

Relative stereochemistry.



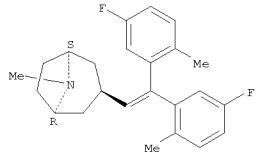
RN 924646-64-0 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-[2,2-bis(3-fluoro-2-methylphenyl)ethenyl]-8-methyl-, (3-endo)- (CA INDEX NAME)

Relative stereochemistry.



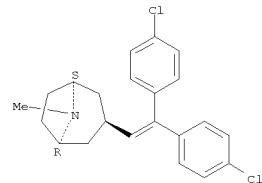
RN 924646-66-2 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-[2,2-bis(5-fluoro-2-methylphenyl)ethenyl]-8-methyl-, (3-endo)- (CA INDEX NAME)

Relative stereochemistry.



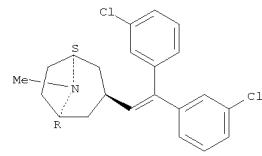
CN 8-Azabicyclo[3.2.1]octane, 3-[2,2-bis(4-chlorophenyl)ethenyl]-8-methyl-, (3-endo)- (CA INDEX NAME)

Relative stereochemistry.



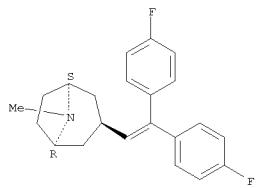
RN 924646-84-4 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-[2,2-bis(3-chlorophenyl)ethenyl]-8-methyl-, (3-endo)- (CA INDEX NAME)

Relative stereochemistry.



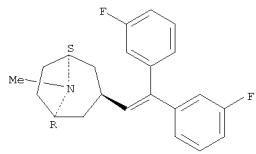
RN 924646-85-5 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-[2,2-bis(4-fluorophenyl)ethenyl]-8-methyl-, (3-endo)- (CA INDEX NAME)

Relative stereochemistry.



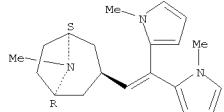
RN 924646-86-6 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-[2,2-bis(3-fluorophenyl)ethenyl]-8-methyl-, (3-endo)- (CA INDEX NAME)

Relative stereochemistry.



RN 924646-87-7 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-[2,2-bis(1-methyl-1H-pyrrol-2-yl)ethenyl]-8-methyl-, (3-exo)- (CA INDEX NAME)

Relative stereochemistry.



ACCESSION NUMBER: 2006-578252 CAPLUS

DOCUMENT NUMBER: 145:55947

TITLE: Muscarinic antagonists for the treatment of respiratory diseases

INVENTOR(S): Laine, Dramane Ibrahim; Palovich, Michael R.

PATENT ASSIGNEE(S): Smithkline Beecham Corporation, USA

SOURCE: PCT Int. Appl., 21 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006062883	A2	20060615	WO 2005-US43875	20051205
WO 2006062883	A3	20070329		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CO, CI, GM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				

PRIORITY APPLN. INFO.: US 2004-633669P P 20041206

OTHER SOURCE(S): MARPAT 145:55947

AB This invention relates to derivs. of 8-azabicyclo[3.2.1]octane, pharmaceutical compns. in combination with one or more other therapeutic ingredients, such as β -adrenoreceptor agonists, antihistamines, allergy inhibitors, and inflammation inhibitors for the treatment of muscarinic acetylcholine receptor-mediated diseases of the respiratory tract. The claimed combination medication includes (3-endo)-3-(2,2-di-thienylethenyl)-8,8-dimethyl-8-azabicyclo[3.2.1]octane bromide, salmeterol xinafoate, and fluticasone propionate.

IT 102924-25-4 107422-05-9 107894-96-2

108042-35-8 834881-95-7

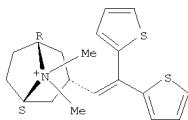
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(muscarinic antagonists for treatment of respiratory diseases)

RN 102924-25-4 CAPLUS

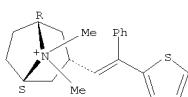
CN 8-Azabicyclo[3.2.1]octane, 3-(2,2-di-2-thienylethenyl)-8,8-dimethyl-, bromide, (3-endo)- (9CI) (CA INDEX NAME)

Relative stereochemistry.

● Br⁻

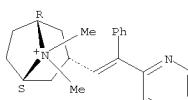
RN 107422-05-9 CAPLUS
 CN 8-Azoniambicyclo[3.2.1]octane, 8,8-dimethyl-3-[2-phenyl-2-(2-thienyl)ethenyl]-, bromide, (3-endo)- (9CI) (CA INDEX NAME)

Relative stereochemistry.
 Double bond geometry unknown.

● Br⁻

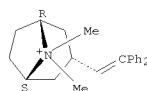
RN 107694-96-2 CAPLUS
 CN 8-Azoniambicyclo[3.2.1]octane, 8,8-dimethyl-3-[2-phenyl-2-(2-pyridinyl)ethenyl]-, bromide, (3-endo)- (9CI) (CA INDEX NAME)

Relative stereochemistry.
 Double bond geometry unknown.

● Br⁻

RN 108042-35-9 CAPLUS
 CN 8-Azoniambicyclo[3.2.1]octane, 3-(2,2-diphenylethenyl)-8,8-dimethyl-,

Relative stereochemistry.

● Br⁻

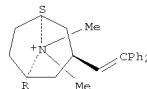
RN 834881-95-7 CAPLUS
 CN 8-Azoniambicyclo[3.2.1]octane, 3-(2,2-diphenylethenyl)-8,8-dimethyl-, (3-endo)-, salt with 4-methylbenzenesulfonic acid (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 715649-17-5

CMF C23 H28 N

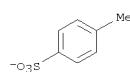
Relative stereochemistry.



CM 2

CRN 16722-51-3

CMF C7 H7 O3 S



IT 890126-10-0
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (muscarinic antagonists in combination with other actives for treatment

of respiratory diseases)
 RN 890126-10-0 CAPLUS
 CN Androsta-1,4-diene-17-carbothioic acid, 6,9-difluoro-11-hydroxy-16-methyl-

L4 ANSWER 3 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
 3-oxo-17-(1-oxopropoxy)-, S-(fluoromethyl) ester, (6 α ,11 β ,16 α ,17 α)-, mixt. with (3-endo)-3-(2,2-di-2-thienylethenyl)-8,8-dimethyl-8-azoniambicyclo[3.2.1]octane bromide and 1-hydroxy-2-naphthalenecarboxylic acid compd. with 4-hydroxy- α 1-[(16-(4-phenylbutoxy)hexyl)amino]methyl-1,3-benzendimethanol (1:1) (9CI) (CA INDEX NAME)

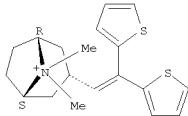
(CA INDEX NAME)

CM 1

CRN 102924-25-4

CMF C19 H24 N S2 Br

Relative stereochemistry.

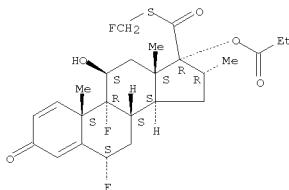
● Br⁻

CM 2

CRN 80474-14-2

CMF C25 H31 F3 O5 S

Absolute stereochemistry.



CM 3

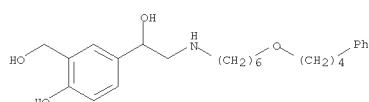
CRN 94749-08-3

CMF C25 H37 N O4 C11 H8 O3

CM 4

CRN 89365-50-4

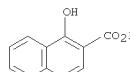
CMF C25 H37 N O4



CM 5

CRN 86-48-6

CMF C11 H8 O3



L4 ANSWER 4 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 20061558688 CAPLUS
 DOCUMENT NUMBER: 145:40272
 TITLE: Muscarinic antagonists in combination with β -adrenoreceptor agonists and/or anti-inflammatories for the treatment of respiratory diseases
 INVENTOR(S): Laine, Dramane Ibrahim; Palovich, Michael R.
 PATENT ASSIGNEE(S): Smithkline Beecham Corporation, USA
 SOURCE: PCT Int. Appl., 20 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006062931	A2	20060615	WO 2005-US44033	20051205
WO 2006062931	A3	20070419		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LZ, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OR			
PRIORITY APPLN. INFO.: US 2004-633618P			P 20041206	

AB This invention relates to a combination of (3-endo)-3-(2,2-di-thienylethethyl)-8,8-dimethyl-8-azoniabicyclo[3.2.1]octane bromide, with one or more other therapeutic ingredients selected from β -adrenoreceptor agonists and inflammation inhibitors for the treatment of muscarinic acetylcholine receptor-mediated diseases of the respiratory tract. A claimed combination medication includes (3-endo)-3-(2,2-di-thienylethethyl)-8,8-dimethyl-8-azoniabicyclo[3.2.1]octane bromide, salmeterol xinafoate, and fluticasone propionate.

IT 102924-25-4 890126-10-0

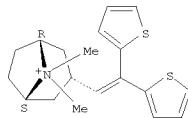
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (muscarinic antagonists in combination with β -adrenoreceptor agonists and/or anti-inflammatories for treatment of respiratory diseases)

RN 102924-25-4 CAPLUS

CN 8-Azoniabicyclo[3.2.1]octane, 3-(2,2-di-2-thienylethethyl)-8,8-dimethyl-, bromide, (3-endo)- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L4 ANSWER 4 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

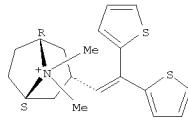


● Br⁻

RN 890126-10-0 CAPLUS
 CN Androsta-1,4-diene-17-carbothioic acid, 6,9-difluoro-11-hydroxy-16-methyl-3-oxo-17-(1-oxopropoxy)-, S-(fluoromethyl) ester, (6a,11b,16a,17a)- mixt. with (3-endo)-3-(2,2-di-2-thienylethethyl)-8,8-dimethyl-8-azoniabicyclo[3.2.1]octane bromide and 1-hydroxy-2-naphthalenecarboxylic acid compd. with 4-hydroxy- α 1-[(6-(4-phenylbutoxy)hexyl)amino]methyl-1,3-benzenedimethanol (1:1) (9CI) (CA INDEX NAME)

CM 1
 CRN 102924-25-4
 CMF C19 H24 N S2 . Br

Relative stereochemistry.

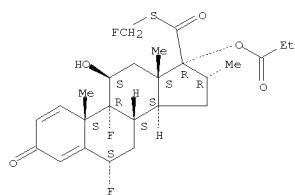


● Br⁻

CM 2
 CRN 80474-14-2
 CMF C25 H31 F3 O5 S

Absolute stereochemistry.

L4 ANSWER 4 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

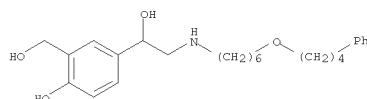


CM 3

CRN 94749-08-3
 CMF C25 H37 N O4 . C11 H8 O3

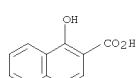
CM 4

CRN 89365-50-4
 CMF C25 H37 N O4



CM 5

CRN 86-48-6
 CMF C11 H8 O3



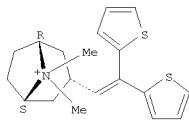
L4 ANSWER 5 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005-99356 CAPLUS
 DOCUMENT NUMBER: 142:183482
 TITLE: Muscarinic acetylcholine receptor antagonists
 INVENTOR(S): Belmonte, Kristen E.; Busch-Petersen, Jakob; Laine, Dramane; Palovich, Michael R.
 PATENT ASSIGNEE(S): Glaxo Group Limited, UK
 SOURCE: PCT Int. Appl., 19 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005093439	A1	20050203	WO 2004-US22947	20040716
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, AZ, BY, GH, KZ, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG	AU 2004-259232	AU 2004-259232	20040716
CA 2532375	A1	20050203	CA 2004-2532375	20040716
EP 1648460	A1	20060426	EP 2004-778451	20040716
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, HR, CN 1822838	A: 20060823	CN 2004-8020649	20040716	
BR 2004012716	A: 20060926	BR 2004-12716	20040716	
JP 2007523877	T: 20070823	JP 2006-520377	20040716	
IN 2006DN00074	A: 20070824	IN 2006-DN74	20060104	
MX 2006PA00662	A: 20060330	MX 2006-PA662	20060117	
US 2006178395	A1: 20060810	US 2006-565046	20060117	
NO 2006000775	A: 20060411	NO 2006-775	20060217	
PRIORITY APPLN. INFO.:		US 2003-487981P	P 20030717	
		WO 2004-US22947	W 20040716	

OTHER SOURCE(S): MARPAT 142:183482
 AB Muscarinic acetylcholine receptor antagonists, e.g., (3-endo)-3-(2,2-diphenylethethyl)-8,8-dimethyl-8-azoniabicyclo[3.2.1]octane bromide and methods of using them are provided. In addition a pharmaceutical composition for the treatment of muscarinic acetylcholinereceptor-mediated diseases comprising the above compound is disclosed.

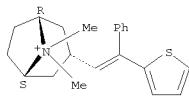
IT 102924-25-4 107422-05-9 107894-96-2 108042-35-9 834881-95-7
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (muscarinic acetylcholine receptor antagonists)
 RN 102924-25-4 CAPLUS
 CN 8-Azoniabicyclo[3.2.1]octane, 3-(2,2-di-2-thienylethethyl)-8,8-dimethyl-, bromide, (3-endo)- (9CI) (CA INDEX NAME)



● Br⁻

RN 107422-05-9 CAPLUS
CN 8-Azoniarbicyclo[3.2.1]octane, 8,8-dimethyl-3-[2-phenyl-2-(2-thienyl)ethenyl]-, bromide, (3-endo)- (9CI) (CA INDEX NAME)

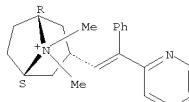
Relative stereochemistry.
Double bond geometry unknown.



● Br⁻

RN 107894-96-2 CAPLUS
CN 8-Azoniarbicyclo[3.2.1]octane, 8,8-dimethyl-3-[2-phenyl-2-(2-pyridinyl)ethenyl]-, bromide, (3-endo)- (9CI) (CA INDEX NAME)

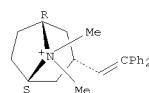
Relative stereochemistry.
Double bond geometry unknown.



● Br⁻

RN 108042-35-9 CAPLUS

Relative stereochemistry.



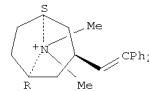
● Br⁻

RN 834881-95-7 CAPLUS
CN 8-Azoniarbicyclo[3.2.1]octane, 3-(2,2-diphenylethenyl)-8,8-dimethyl-, (3-endo)-, salt with 4-methylbenzenesulfonic acid (1:1) (9CI) (CA INDEX NAME)

CM 1

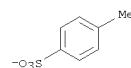
CRN 715649-17-5
CMF C23 H28 N

Relative stereochemistry.



CM 2

CRN 16722-51-3
CMF C7 H7 O3 S

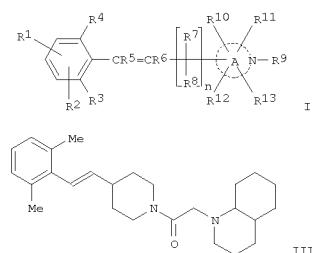


REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 6 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2004:756683 CAPLUS
DOCUMENT NUMBER: 141:260786
TITLE: Preparation of nitrogenous heterocyclic derivatives having 2,6-disubstituted styryl as sodium channel inhibitors
INVENTOR(S): Kikuchi, Kazumi; Oku, Makoto; Fujiyasu, Jiro; Asai, Norio; Watanabe, Toshihiro; Nagakura, Yukinori; Tomiyama, Hiroshi; Somegawa, Motoharu; Tokuzaki, Kaeo; Iwai, Yoshinori
PATENT ASSIGNEE(S): Yamanouchi Pharmaceutical Co. Ltd., Japan; Kotobuki Pharmaceutical Co. Ltd.
SOURCE: PCT Int. Appl., 64 pp.
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

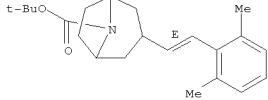
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004078715	A1	20040916	WO 2004-JP2842	20040305
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JE, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LV, MA, MD, MG, MK, MN, MW, MX, NA, NI, RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2004218115	A1	20040916	AU 2004-218115	20040305
CA 2517081	A1	20040916	CA 2004-2517081	20040305
EP 1602645	A1	20051207	EP 2004-717835	20040305
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK				
BR 2004008136	A	20060301	BR 2004-8136	20040305
CN 1756740	A	20060405	CN 2004-80005921	20040305
MX 2005PA09290	A	20060531	MX 2005-PA3290	20050831
NO 2005004607	A	20051206	NO 2005-4607	20051006
IN 2005KN01977	A	20061110	IN 2005-KN1977	20051006
US 2007099956	A1	20070503	US 2006-548197	20061213
PRIORITY APPLN. INFO.:			JP 2003-61758	A 20030307
		WO 2004-JP2842		W 20040305

OTHER SOURCE(S): MARPAT 141:260786
GI



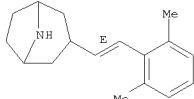
AB Novel nitrogenous heterocyclic derivs. having 2,6-disubstituted styryl or pharmaceutically acceptable salts thereof [I; R1, R2 = H, (un)substituted lower alkyl, cycloalkyl, aryl, acyl, CO2H, lower alkoxy carbonyl, CONH2, mono- or di(lower alkyl)carbamoyl, HO, lower alkoxy, aryl oxy, aryl oxy, NH2, mono- or di(lower alkyl)amino, acylamino, halo, NO2, heterocyclic, cyano; R3, R4 = (un)substituted lower alkyl, cycloalkyl, acyl, CO2H, lower alkoxy carbonyl, CONH2, mono- or di(lower alkyl)carbamoyl, HO, lower alkoxy, aryl oxy, NH2, mono- or di(lower alkyl)amino, acylamino, halo, NO2, cyano; R5, R6 = H, lower alkyl, halo; R7 = H, lower alkyl, HO, lower alkoxy, halo; or R7 and R8 together represents oxo; R9 = H, each (un)substituted lower alkyl, cycloalkyl, acyl, lower alkoxy carbonyl, lower alkylsulfonyl, or heterocyclic sulfonyl, lower alkyl-C(:NH), CO2H, mono- or di[(un)substituted lower alkyl]amino; R10-R13 = H or lower alkyl, or two groups of R10-R13 together form oxo] are prepared. Also disclosed is a medicinal composition comprising the nitrogenous heterocyclic derivative I or pharmaceutically acceptable salt thereof and a pharmaceutically acceptable carrier, especially a medicinal composition for sodium channel inhibitors which has high analgesic activity against neurogenic pains or diabetic neuropathy and is reduced in side effects. Thus, 125 mg 1-benzyl-4-[(E)-2-(2,6-dimethylphenyl)vinyl]-3-methylpiperidine was dissolved in 3 mL 1,2-dichloroethane, treated with 139 mg 1-chloroethyl chloroformate, refluxed for 3 h, cooled, treated with 10 mL MeOH, refluxed for 30 min to give, after workup and recrystn. from EtOAc-MeOH, 4-[(E)-2-(2,6-dimethylphenyl)vinyl]-3-methylpiperidine monohydrochloride (II). In a sodium channel-inhibitory assay, II and 4-[(E)-2-(2,6-dimethylphenyl)vinyl]piperidine derivative (III) inhibited the veratridine-induced uptake of [¹⁴C]guanidine in rat brain tissue with IC50 of 8.7 and 1.1 μ M, resp., vs. 70 μ M for mexiletine.

L4 ANSWER 6 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
 IT 756878-55-4P 756878-56-5P
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of nitrogenous heterocyclic derivs. having
 2,6-disubstituted
 styryl as sodium channel inhibitors for treatment of neurogenic pains
 or pain associated with diabetic neuropathy)
 RN 756878-55-4 CAPLUS
 CN 8-Azabicyclo[3.2.1]octane-8-carboxylic acid, 3-[(1E)-2-(2,6-dimethylphenyl)ethenyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)
 Double bond geometry as shown.



RN 756878-56-5 CAPLUS
 CN 8-Azabicyclo[3.2.1]octane, 3-[(1E)-2-(2,6-dimethylphenyl)ethenyl]-, hydrochloride (9CI) (CA INDEX NAME)

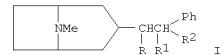
Double bond geometry as shown.



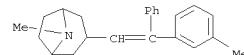
● HCl

REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 7 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
 ACCESSION NUMBER: 1994:164586 CAPLUS
 DOCUMENT NUMBER: 120:164586
 TITLE: Synthesis of anticholinergics of 3-substituted tropane derivatives
 AUTHOR(S): Wu, Peijin; Ran, Yunzhang; Wen, Guangling; Zhang, Qikai
 CORPORATE SOURCE: Inst. Pharmacol. Toxicol., Acad. Mil. Med. Sci., Beijing, 100850, Peop. Rep. China
 SOURCE: Zhongguo Yaowu Huaxue Zazhi (1993), 3(1), 23-6
 DOCUMENT TYPE: Journal
 LANGUAGE: Chinese
 GI



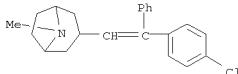
AB Title compds. I (R, R1 = H, OH; R2 = 3-MeC6H4, 4-ClC6H4) were prepared starting from Et 3-tropanylacetate. I showed anticholinergic activity in mice.
 IT 153307-16-5P 153307-17-6P 153307-19-8P
 153307-20-1P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation and anticholinergic activity of)
 RN 153307-16-5 CAPLUS
 CN 8-Azabicyclo[3.2.1]octane,
 8-methyl-3-[(2-(3-methylphenyl)-2-phenylethethyl)-, hydrochloride (9CI) (CA INDEX NAME)



● HCl

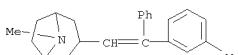
RN 153307-17-6 CAPLUS
 CN 8-Azabicyclo[3.2.1]octane,
 3-[(2-(4-chlorophenyl)-2-phenylethethyl)-8-methyl-, hydrochloride (9CI) (CA INDEX NAME)

L4 ANSWER 7 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

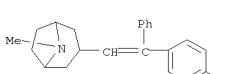


● HCl

RN 153307-19-8 CAPLUS
 CN 8-Azabicyclo[3.2.1]octane,
 8-methyl-3-[(2-(3-methylphenyl)-2-phenylethethyl)-, (CA INDEX NAME)



RN 153307-20-1 CAPLUS
 CN 8-Azabicyclo[3.2.1]octane,
 3-[(2-(4-chlorophenyl)-2-phenylethethyl)-8-methyl-, (CA INDEX NAME)



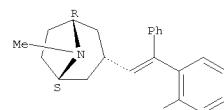
L4 ANSWER 8 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
 ACCESSION NUMBER: 1986:95588 CAPLUS
 DOCUMENT NUMBER: 104:95588
 ORIGINAL REFERENCE NO.: 104:15049a,15052a
 TITLE: The fluorometric ion pair method for the determination of several tertiary amines

AUTHOR(S): Zhang, Liming; Yu, Yongxiang
 CORPORATE SOURCE: Acad. Mil. Med. Sci., Beijing, Peop. Rep. China
 SOURCE: Yaowu Xuebao (1985), 20(10), 752-8
 DOCUMENT TYPE: Journal
 LANGUAGE: Chinese

AB Tertiary amines (nonfluorescent) at low concns. (10-8 to 10-7M) are dissolved in pH 2-4 phosphate buffer, mixed with aqueous Na 9,10-dimethoxyanthracene-2-sulfonate, extracted with 1,2-dichloroethane, and the fluorescence is measured at 446 nm (excitation 383 nm). Fluorescence-concentration plots were linear for approx. 5-100 ng/mL of benethiopine, kemadrin, methylbenethiopine, caramiphen, gangleron, and benztrapine. The limit of detection was 1 ng/mL and the relative standard deviation was <5.

IT 100345-20-8
 RL: ANT (Analyte); ANST (Analytical study)
 (determination of, by fluorometry of ion pair with dimethoxyanthracene sulfonate)
 RN 100345-20-8 CAPLUS
 CN 8-Azabicyclo[3.2.1]octane,
 8-methyl-3-[(2-(2-methylphenyl)-2-phenylethethyl)-, endo-, (9CI) (CA INDEX NAME)

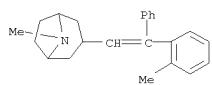
Relative stereochemistry.
 Double bond geometry unknown.



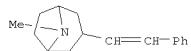
L4 ANSWER 9 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 1985:505186 CAPLUS
 DOCUMENT NUMBER: 103:105186
 ORIGINAL REFERENCE NO.: 103:16860h,16861a
 TITLE: Studies on anticholinergics: synthesis of 3-substituted tropane derivatives
 AUTHOR(S): Ran, Yunzhang; Wu, Peijin; Wen, Guangling; Zhang, Qikai
 CORPORATE SOURCE: Inst. Pharmacol. Toxicol., Acad. Milit. Med. Sci., Beijing, Peop. Rep. China
 SOURCE: Yaoxue Xuebao (1984), 19(5), 361-6
 CODEN: YHHPAL; ISSN: 0513-4870
 DOCUMENT TYPE: Journal
 LANGUAGE: Chinese
 GI



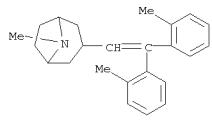
AB Tropanes I (R = H, R₁ = OH, R₂ = Ph, 2-MeC₆H₄, 4-MeC₆H₄, 4-MeOC₆H₄, 2-pyrrolyl, cyclopentyl, R₃ = H, Ph, 2-MeC₆H₄, cyclopentyl; R₁ = bond, R₂,R₃ = same as above; R = R₁ = H, R₂,R₃ = same as above) were prepared from 3-tropanone (II). Most of I showed anticholinergic activity in mice. Structure-activity relationships was discussed.
 IT 88543-21-9 98042-91-2P 98042-92-3P
 98042-93-4P 98042-94-5P 98042-95-6P
 98042-96-7P 98042-97-8P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation, hydrogenation, and anticholinergic activity of)
 RN 88543-21-9 CAPLUS
 CN 8-Azabicyclo[3.2.1]octane, 8-methyl-3-[2-(2-methylphenyl)-2-phenylethenyl]- (CA INDEX NAME)



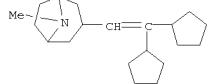
RN 98042-91-2 CAPLUS
 CN 8-Azabicyclo[3.2.1]octane, 8-methyl-3-(2-phenylethenyl)- (CA INDEX NAME)



L4 ANSWER 9 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

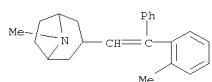


RN 98042-97-8 CAPLUS
 CN 8-Azabicyclo[3.2.1]octane, 3-(2,2-dicyclopentylethenyl)-8-methyl-, hydrochloride (9CI) (CA INDEX NAME)

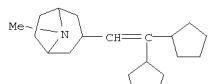


● HCl

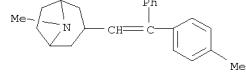
IT 88543-21-9P 98043-09-5P 98988-11-5P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation, salt formation, and anticholinergic activity of)
 RN 88543-21-9 CAPLUS
 CN 8-Azabicyclo[3.2.1]octane, 8-methyl-3-[2-(2-methylphenyl)-2-phenylethenyl]- (CA INDEX NAME)



RN 98043-09-5 CAPLUS
 CN 8-Azabicyclo[3.2.1]octane, 3-(2,2-dicyclopentylethenyl)-8-methyl- (CA INDEX NAME)

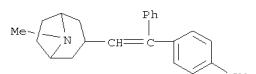


L4 ANSWER 9 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
 RN 98042-92-3 CAPLUS
 CN 8-Azabicyclo[3.2.1]octane, 3-[2-(4-methoxyphenyl)-2-phenylethenyl]-8-methyl- (CA INDEX NAME)

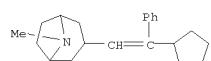


● HCl

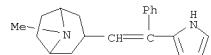
RN 98042-93-4 CAPLUS
 CN 8-Azabicyclo[3.2.1]octane, 3-[2-(4-methoxyphenyl)-2-phenylethenyl]-8-methyl- (CA INDEX NAME)



RN 98042-94-5 CAPLUS
 CN 8-Azabicyclo[3.2.1]octane, 3-(2-cyclopentyl-2-phenylethenyl)-8-methyl- (CA INDEX NAME)



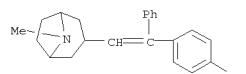
RN 98042-95-6 CAPLUS
 CN 8-Azabicyclo[3.2.1]octane, 8-methyl-3-[2-phenyl-2-(1H-pyrrol-2-yl)ethenyl]- (CA INDEX NAME)



RN 98042-96-7 CAPLUS
 CN 8-Azabicyclo[3.2.1]octane, 3-[2,2-bis(2-methylphenyl)ethenyl]-8-methyl- (CA INDEX NAME)

L4 ANSWER 9 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

RN 98988-11-5 CAPLUS
 CN 8-Azabicyclo[3.2.1]octane, 8-methyl-3-[2-(4-methylphenyl)-2-phenylethenyl]- (CA INDEX NAME)

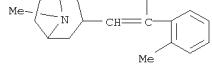


RN 98042-97-8 CAPLUS
 CN 8-Azabicyclo[3.2.1]octane, 3-(2,2-dicyclopentylethenyl)-8-methyl-, hydrochloride (9CI) (CA INDEX NAME)

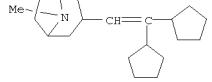


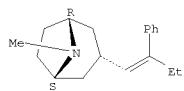
● HCl

IT 88543-21-9P 98043-09-5P 98988-11-5P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation, salt formation, and anticholinergic activity of)
 RN 88543-21-9 CAPLUS
 CN 8-Azabicyclo[3.2.1]octane, 8-methyl-3-[2-(2-methylphenyl)-2-phenylethenyl]- (CA INDEX NAME)



RN 98043-09-5 CAPLUS
 CN 8-Azabicyclo[3.2.1]octane, 3-(2,2-dicyclopentylethenyl)-8-methyl- (CA INDEX NAME)

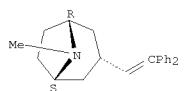




● HCl

RN 101058-02-0 CAPLUS
 CN 8-Azabicyclo[3.2.1]octane, 3-(2,2-diphenylethenyl)-8-methyl-, endo- (7CI) (CA INDEX NAME)

Relative stereochemistry.

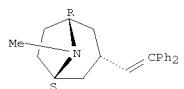


RN 101058-03-1 CAPLUS
 CN Tropane, 3a-(2,2-diphenylethyl)-, picrate (7CI) (CA INDEX NAME)

CM 1

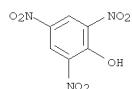
CRN 101058-02-0
 CMF C22 H25 N

Relative stereochemistry.

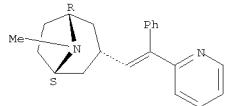


CM 2

CRN 88-89-1
 CMF C6 H3 N3 O7

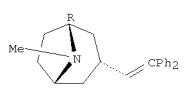


Relative stereochemistry.
 Double bond geometry unknown.



RN 106194-08-5 CAPLUS
 CN Tropane, 3a-(2,2-diphenylethyl)-, hydrochloride (7CI) (CA INDEX NAME)

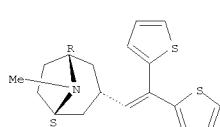
Relative stereochemistry.



● HCl

RN 106300-51-0 CAPLUS
 CN Tropane, 3a-(2,2-di-2-thienylvinyl)-, hydrochloride (7CI) (CA INDEX NAME)

Relative stereochemistry.



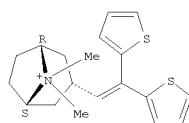
● HCl

RN 106801-38-1 CAPLUS
 CN 3a-(β -Cyclohexylstyryl)-8-methyltroponium bromide (7CI) (CA INDEX NAME)

Relative stereochemistry.
 Double bond geometry unknown.

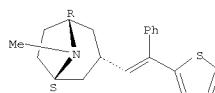
RN 102924-25-4 CAPLUS
 CN 8-Azonabicyclo[3.2.1]octane, 3-(2,2-di-2-thienylvinyl)-8-dimethyl-, bromide, (3-endo)- (9CI) (CA INDEX NAME)

Relative stereochemistry.

● Br⁻

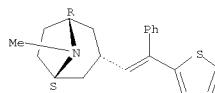
RN 104763-78-2 CAPLUS
 CN Tropane, 3a-(β -2-thienylstyryl)- (7CI) (CA INDEX NAME)

Relative stereochemistry.
 Double bond geometry unknown.



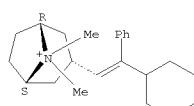
RN 104781-44-4 CAPLUS
 CN Tropane, 3a-(β -2-thienylstyryl)-, hydrochloride (7CI) (CA INDEX NAME)

Relative stereochemistry.
 Double bond geometry unknown.



● HCl

RN 106172-58-1 CAPLUS
 CN Tropane, 3a-(β -2-pyridylstyryl)- (7CI) (CA INDEX NAME)

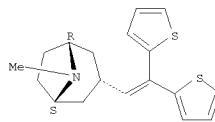
● Br⁻

RN 106843-61-2 CAPLUS
 CN Tropane, 3a-(2,2-di-2-thienylvinyl)-, picrate (7CI) (CA INDEX NAME)

CM 1

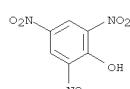
CRN 106843-60-1
 CMF C18 H21 N S2

Relative stereochemistry.



CM 2

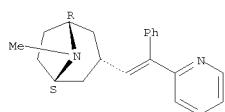
CRN 88-89-1
 CMF C6 H3 N3 O7



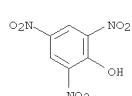
RN 107063-12-7 CAPLUS
 CN Tropane, 3a-(β -2-pyridylstyryl)-, picrate (7CI) (CA INDEX NAME)

CM 1

CRN 106172-58-1
 CMF C21 H24 N2



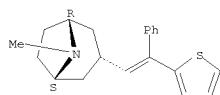
CM 2
 CRN 88-89-1
 CMF C6 H3 N3 O7



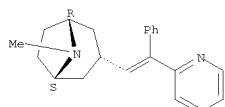
RN 107063-70-7 CAPLUS
 CN Tropane, 3a-(β-2-thienylstyryl)-, picrate (7CI) (CA INDEX NAME)

CM 1
 CRN 104763-78-2
 CMF C20 H23 N S

Relative stereochemistry.
 Double bond geometry unknown.

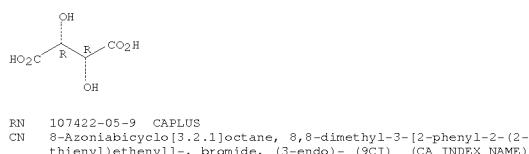


CM 2
 CRN 88-89-1
 CMF C6 H3 N3 O7



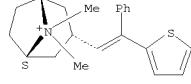
CM 2
 CRN 87-69-4
 CMF C4 H6 O6

Absolute stereochemistry.



RN 107422-05-9 CAPLUS
 CN 8-Azoniabicyclo[3.2.1]octane, 8,8-dimethyl-3-[2-phenyl-2-(2-phenyl)ethenyl]-, bromide, (3-endo)- (9CI) (CA INDEX NAME)

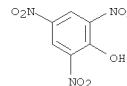
Relative stereochemistry.
 Double bond geometry unknown.



● Br⁻

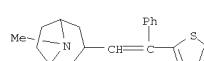
RN 107894-96-2 CAPLUS
 CN 8-Azoniabicyclo[3.2.1]octane, 8,8-dimethyl-3-[2-phenyl-2-(2-pyridinyl)ethenyl]-, bromide, (3-endo)- (9CI) (CA INDEX NAME)

Relative stereochemistry.
 Double bond geometry unknown.



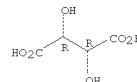
RN 107157-12-0 CAPLUS
 CN Tropane, 3a-(β-2-thienylstyryl)-, tartrate (7CI) (CA INDEX NAME)

CM 1
 CRN 102157-42-6
 CMF C20 H23 N S



CM 2
 CRN 87-69-4
 CMF C4 H6 O6

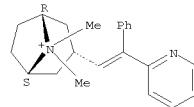
Absolute stereochemistry.



RN 107242-35-3 CAPLUS
 CN Tropane, 3a-(β-2-pyridylstyryl)-, tartrate (7CI) (CA INDEX NAME)

CM 1
 CRN 106172-58-1
 CMF C21 H24 N2

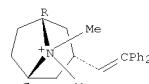
Relative stereochemistry.
 Double bond geometry unknown.



● Br⁻

RN 108042-35-9 CAPLUS
 CN 8-Azoniabicyclo[3.2.1]octane, 3-(2,2-diphenylethenyl)-8,8-dimethyl-, bromide, (3-endo)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



● Br⁻

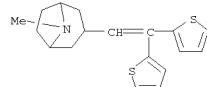
RN 107894-96-2 CAPLUS
 CN 8-Azoniabicyclo[3.2.1]octane, 8,8-dimethyl-3-[2-phenyl-2-(2-pyridinyl)ethenyl]-, bromide, (3-endo)- (9CI) (CA INDEX NAME)

Relative stereochemistry.
 Double bond geometry unknown.

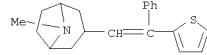
L4 ANSWER 12 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 1958:93024 CAPLUS
 DOCUMENT NUMBER: 52:93024
 ORIGINAL REFERENCE NO.: 52:16402b-f
 TITLE: 8-Alkylnortropane derivatives
 INVENTOR(S): Zirkle, Charles L.
 PATENT ASSIGNEE(S): Smith, Kline & French Laboratories
 DOCUMENT TYPE: Patent
 LANGUAGE: Unavailable
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE
 US 2800482 19570723 US 1955-519650 19550701
 AB 3-Benzhydrylidene tropane picrate m. 237-8° (aqueous alc.); methobromide, m. 281-5° (iso-PrOH-Me2CO); etho(ethyl sulfate), white solid, Di(2-thienyl)-3-tropanylicarbinol (0.5 g.) in CHCl3 treated with dry HCl until strongly acid gave
 2-[di(2-thienyl)methylidene]tropane-
 HCl, m. 224-5° (alc. Et2O), 1,1-Di(2-thienyl)-3-tropaneethanol (1 g.) 2 g. (CO2H)2, and 3 ml. H2O refluxed 2 hrs. gave
 1,1-di(2-thienyl)-2-(3-tropanylyl)ethylene, m. 74-6° (lignoine); picrate, m. 190-2° (aqueous Me2CO); HCl salt, m. 230-2° (alc. Et2O); methobromide, m. 252-3°. 1,1-Diphenyl-2-(3-tropanylyl)ethylene methobromide, m. 286° (alc.); maleate; metho-p-toluene-sulfonate, white solid. 1-Phenyl-1-(2-thienyl)-3-tropaneethanol (9.7 g.), 19.4 g. (CO2H)2, and 29 ml. H2O refluxed 2 hrs. and the mixture made alkaline gave
 1-phenyl-1-(2-thienyl)-2-(3-tropanylyl)ethylene, m. 69-72°; picrate, m. 209-10°; tartrate, m. 174-5° (alc. Et2O); methobromide, m. 258-9° (alc. Et2O). 1-Phenyl-1-(2-pyridyl)-2-(3-tropanylyl)ethylene methobromide, m. 228-30° (alc. Et2O); tartrate, m. 165-7° (alc. Et2O). 1-(2-Cyclohexyl)ethyl-1-phenyl-3-tropaneethanol (1 g.) in 10 ml. AcOH and 3 ml. 37% HCl refluxed 0.5 hr. gave the dehydration product, λ 235 nm, $\log \epsilon$ 3.58. 1-Cyclohexyl-1-phenyl-2-(3-tropanylyl)ethylene-H4, m. 222.5-4.0°; methobromide, m. 250-3° (H2O); butyride, white solid.
 1,1-Diphenyl-3-tropaneethanol (15 g.) in 50 ml. 37% HCl 1.5 hrs. at 100° gave 1,1-diphenyl-1-(3-tropane-1-propene, m. 59-60°, b.p. 170-3°; citrate, m. 174°. 1-(2-Pyridyl)-1-p-tolyl-4-(3-tropanylyl)-1-butanol (0.5 g.) and 2 ml. 85% H2SO4 heated 15 min. at 155° gave 1-(2-pyridyl)-1-p-tolyl-4-(3-tropanylyl)-1-butene. A similar dehydration of 1-cyclohexyl-1-phenyl-3-tropaneethanol with HCl gave the corresponding butene as the HCl salt; neutralization with NH4OH gave the free base as a yellow oil.
 IT 101713-89-5, Tropane, 3-(2,2-di-2-thienylvinyl)-
 102157-42-6, Tropane, 3- β -2-thienylstyryl-
 110147-39-2, Tropane, 3-(β -2-pyridylstyryl)-
 (and derivs.)
 RN 101713-89-5 CAPLUS
 CN Tropane, 3-(2,2-di-2-thienylvinyl)- (6CI) (CA INDEX NAME)

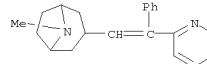
L4 ANSWER 12 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



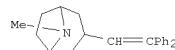
RN 102157-42-6 CAPLUS
 CN Tropane, 3- β -2-thienylstyryl- (6CI) (CA INDEX NAME)



RN 110147-39-2 CAPLUS
 CN Tropane, 3-(β -2-pyridylstyryl)- (6CI) (CA INDEX NAME)

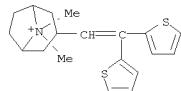


IT 88543-22-0P, Tropane, 3-(2,2-diphenylvinyl)- 110377-10-1P
 , 3-(2,2-Di-2-thienylvinyl)-8-methyltropanium bromide 114402-20-9P
 , Tropane, 3-(β -cyclohexylstyryl)-, hydriodide 119040-93-6P
 , 3-(β -Cyclohexylstyryl)-8-methyltropanium bromide
 124111-32-6P, 8-Butyl-3-(β -cyclohexylstyryl)tropanium iodide
 RL: PREP (Preparation)
 (preparation of)
 RN 88543-22-0 CAPLUS
 CN 8-Azabicyclo[3.2.1]octane, 3-(2,2-diphenylethenyl)-8-methyl- (CA INDEX NAME)



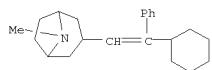
RN 110377-10-1 CAPLUS
 CN 3-(2,2-Di-2-thienylvinyl)-8-methyltropanium bromide (6CI) (CA INDEX NAME)

L4 ANSWER 12 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



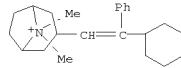
● Br⁻

RN 114402-20-9 CAPLUS
 CN Tropane, 3-(β -cyclohexylstyryl)-, hydriodide (6CI) (CA INDEX NAME)



● HI

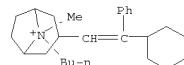
RN 119040-93-6 CAPLUS
 CN 3-(β -Cyclohexylstyryl)-8-methyltropanium bromide (6CI) (CA INDEX NAME)



● Br⁻

RN 124111-32-6 CAPLUS
 CN 8-Butyl-3-(β -cyclohexylstyryl)tropanium iodide (6CI) (CA INDEX NAME)

L4 ANSWER 12 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



● I⁻

RN 110377-10-1 CAPLUS
 CN 3-(2,2-Di-2-thienylvinyl)-8-methyltropanium bromide (6CI) (CA INDEX NAME)

L4 ANSWER 13 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 1958:93020 CAPLUS
 DOCUMENT NUMBER: 52:93020
 ORIGINAL REFERENCE NO.: 52:16399b-i,16400a-i,16401a
 TITLE: 8-Alkylnortropane derivatives
 INVENTOR(S): Zirkle, Charles L.
 PATENT ASSIGNEE(S): Smith, Kline & French Laboratories
 DOCUMENT TYPE: Patent
 LANGUAGE: Unavailable
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE
 US 2004078 19570723 US 1955-519646 19550701
 AB Some new physiologically active 3-substituted-8-alkylnortropanes, the nontoxic organic and inorg. salts, and the quaternary ammonium salts are described. Me (3-hydroxytropane)carboxylate (10 g.) in 50 ml. Ac2O heated 4 hrs. at 100°, the excess Ac2O and AcOH removed in vacuo, the residue poured into H2O, extracted with Et2O, and the Et2O evaporated gave Me 3-(3-acetoxytropane)carboxylate (I), m. 66-79, b15 162-5°. I (29 g.) added dropwise during 7 min. to a vertical tube heated to 420° and filled with pieces of Pyrex tubing, the apparatus swept with N, the product dissolved in dilute HCl, extracted with Et2O, the aqueous acid solution saturated with K2CO3, and the product separated gave Me 3-(2-tropane)carboxylate (II), b15 131-4°, n25.5D 1.4998. II (13 g.) in 100 ml. MeOH hydrogenated over 5 g. Raney Ni at 50 lb./sq. in. at room temperature and the mixture distilled gave Me 3-tropane carboxylate (III), b18 128-32°, n25D 1.4819. III (10.1 g.) in 100 ml. Et2O stirred 1.5 hrs. at room temperature with a solution of PhLi (from 34.5 g. PhBr and 3.5 g. Li) in 100 ml. Et2O, the mixture added to 150 ml. H2O, and the solid collected and purified gave diphenyl-3-tropane carboxylic acid (IV), m. 185.5-6.0° (EtOAc). IV (5.6 g.) in 20 ml. AcOH and 25 ml. dilute HCl refluxed 10 min. and evaporated to dryness gave 3-benzhydrylidene nortropane-HCl, m. 275-8° (alc.-Et2O); free base (V), a colorless oil. V (4 g.) in alc. hydrogenated over Raney Ni at 400 lb./sq. in. at 60° and the product chromatographed on Al2O3 gave 3-benzhydryl tropane (VI), m. 70-2°. VI (1 g.) gave the HCl salt, unmelting below 310°; MeBr salt, m. 277-9°; etho(ethyl sulfate), white solid. Troponine (13.9 g.), 11.3 g. NCCH2CO2Et, 1.6 g. NH4OAc, 7.3 g. AcOH, 20 ml. alc., and 0.6 g. Pd-C shaken under H at 50° and 60 lb./sq. in. gave Et α -cyano-3-tropane acetate (VII), b0.3 116-18°, n24D 1.4942. VII (8 g.) in 30 ml. 37% HCl refluxed 13 hrs. and the crude 3-tropaneacetic acid-HCl esterified by leaving 3 days at room temperature in 50 ml. EtOH with dry HCl gave Et 3-tropaneacetate (VIII), b2 104-5°, n25D 1.4774. VIII (42 g.) in 100 ml. Et2O similarly treated with PhLi gave 1,1-diphenyl-3-tropaneethanol (IX), m. 146.5-7.5° (EtOAc). IX (14.6 g.) in 29 ml. 37% HCl and 100 ml. AcOH refluxed 0.5 hr. gave 1,1-diphenyl-2-(3-tropanyl)ethylene (X), as the HCl salt, m. 217-18° (alc.-Et2O); free base, b0.9 109.5-10.0° (Me2CO). X (10 g.) in alc. hydrogenated over Raney Ni at 500 lb./sq. in. and 60° gave 1,1-diphenyl-2-(3-tropanyl)ethane, colorless oil; HCl salt, m. 244-5°; methobromide, m. 257-8° (alc.-Et2O);

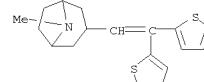
L4 ANSWER 13 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
 0° gave 1-(p-anisyl)-1-phenyl-3-(N-isopropylnortropane)ethanol (XIV), white solid. Dehydration of XIV with oxalic acid and H2O gave the ethylene, which when hydrogenated as described above gave 1-p-anisyl-1-phenyl-2-(3-(N-isopropylnortropane)ethyl)ethane; methobromide salt. VIII (164 g.) in 50 ml. Et2O refluxed 3 hrs. with 30 g. LiAlH4 in 2 l. Et2O gave 3-tropaneethanol (XV), m. 63-4° (C6H6-ligroine). XV (10 g.) in 50 ml. CHCl3 treated with 14.3 g. SOCl2, refluxed 45 min., and isolation gave 1-chloro-2-(3-tropanyl)ethane-HCl, m. 167-8° (alc.-Et2O); free base, b0.9 81°. The base (47 g.) and 0.1 g. NaI refluxed 17 hrs. with 49 g. KCN in 175 ml. alc. and 75 ml. H2O, NaOH added to the residual mixt., and the product isolated gave 3-tropane propionitrile (XVI), b0.3 114-16°, n25D 1.4958. XVI (25 g.) in 100 ml. 37% HCl refluxed several hrs., and evapd., the residue dissolved in 300 ml. alc., 5 ml. concd. H2SO4 added, and the residue treated with 40% NaOH gave Et 3-tropane propionate (XVII), b0.4 97-100°, n25D 1.4770. Similarly XVII treated with PhLi gave 1,1-diphenyl-3-tropane propanoate (XVIII), m. 141-2.5°. Dehydration of XVIII with concd. HCl and 40% NaOH added gave 1,1-diphenyl-3-(3-tropanyl)-1-propene (XIX), b0.4 170-3°, m. 59-60°. XIX (4.7 g.) hydrogenated over 5 g. Raney Ni gave 1,1-diphenyl-3-(3-tropanyl)propane as an oil; citrate, m. 170°; methobromide, m. 277°. XVII reduced with 3 g. LiAlH4 gave 3-tropane propanoate (XXX), b2 128-31°. XXX (7.7 g.) treated with 10 g. SOCl2 gave the HCl salt, which treated with K2CO3 liberated 1-chloro-3-(3-tropanyl)propane (XXXI), b1 100-2°. XXXI (5 g.) refluxed 18 hrs. with 0.1 g. NaI, 5 g. KCN, 18 ml. alc., and 8 ml. H2O gave 3-tropane butyronitrile (XXXII), b0.3 132-5°. XXXII (3 g.) refluxed several hrs. with concd. HCl and the product treated with 40% NaOH gave Et 3-tropane propanoate (XXXIII), b0.5 115-19°. XXXIII (2.3 g.) similarly treated with p-tolyl magnesium bromide gave p-tolyl γ -(3-tropanyl)propyl ketone (XXXIV), b0.2 188-92°. XXXIV (1.5 g.) in 15 ml. Et2O treated with BuLi and 2-bromopyridine in Et2O gave 1-(2-pyridyl)-1-p-tolyl-3-tropane butanol (XXXV), cryst. solid. XXXV (0.5 g.) dehydrated with 85% H2SO4, and the product reduced as described above gave 1-(2-pyridyl)-1-p-tolyl-4-(3-tropanyl)butane. II (9.2 g.) with MeLi gave dimethyl-3-tropane carbinol, which was dehydrated by refluxing with AcOH and concd. HCl, and the product hydrogenated over Raney Ni to give 3-isopropyltropane as an oil. XXII (11.3 g.) treated with C6H3Li gave 1,1-dimethyl-3-(N-isopropylnortropane)ethanol (XXXVI), white solid. XXXVI (8 g.) refluxed 45 min. with AcOH and HCl gave an unsatd. product as the HCl salt which was hydrogenated over Raney Ni to 2-hexyl-1-[3-(N-isopropylnortropane)octane as an oil. XXXVII (14.3 g.) similarly treated with cyclopentylmagnesium bromide gave cyclopentyl 3-(3-tropanyl)propyl ketone (XXXVII), b0.9 152-6°. XXXVII (3.5 g.) dehydrated and the product reduced over Raney Ni gave 1-cyclopentyl-1-phenyl-4-(3-tropanyl)butane, a colorless oil.

IT 101719-88-4 101719-89-5 102157-42-6
 110377-10-1 111979-88-5 114402-20-9
 114723-81-8 118801-08-4 119040-93-6
 124111-32-6 124138-73-4
 (Derived from data in the 6th Collective Formula Index (1957-1961))

RN 101719-88-4 CAPLUS
 CN Tropane, 3-(2,2-di-2-thienylvinyl)-, hydrochloride (6CI) (CA INDEX NAME)

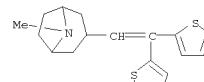
L4 ANSWER 13 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
 metho-p-toluenesulfonate, white solid; maleate, obtained by treating with maleic acid in alc. VIII in 37% HCl refluxed several hrs. gave 3-tropaneacetic acid-HCl (XI), m. 172-4° (MeOH-Et2O). XI (11 g.) similarly treated with PhLi followed by passage of HCl gave the HCl salt which when washed was reconvereted to phenyl 3-tropanylmethyl ketone (XII), b0.2 138-41°. BuLi (from 3.7 g. BuCl and 0.7 g. Li) in 25 ml. Et2O treated slowly at -45° with 5.5 g. 2-bromopyridine in 10 ml. Et2O, the mixt. stirred 10 min., and 2.5 g. XII in 30 ml. Et2O added slowly, the mixt. stirred 15 min. at -15°, 50 ml. H2O added, the mixt. stirred a further 15 min., a solid collected, the solid stirred with CHCl3 and H2O, and the CHCl3 layer removed, combined with the Et2O layer and evapd. gave 1-phenyl-1-(2-pyridyl)-3-tropaneethanol (XIII), m. 117-18.5° (EtOAc). XIII (1 g.) and 2 ml. 85% H2SO4 heated 15 min. at 155° and the soln. made basic gave 1-phenyl-1-(2-pyridyl)-2-(3-tropanyl)ethylethane (XIV), m. 97.5-9.5° (Me2CO). XIV (0.2 g.), 5 g. cyclohexene, and 0.3 g. 20% Pd-C refluxed 48 hrs. gave 1-phenyl-1-(2-pyridyl)-2-(3-tropanyl)ethane (XV) as a thick oil; picrate, m. 201-3° (aq. Me2CO). XV also forms the tartrate, m. 78-80° (alc.-Et2O). XV (12.2 g.) in 50 ml. Et2O added slowly to EtMgBr soln. (from 7.3 g. Mg) at 0° the mixt. stirred 1.5 hrs. at room temp., then refluxed 1.5 hrs., decompd. with ice and 23 g. NH4Cl in 50 ml. H2O, the Et2O layer removed, and the aq. phase extd. with CHCl3 gave 1-ethyl-1-phenyl-3-tropaneethanol (XVI), m. 119-20°. XVI (0.44 g. g.) was dehydrated by heating 40 min. at 100° with 3 ml. concd. HCl to the ethylene, m. 170-200°. The ethylene hydrogenated in alc. over Raney Ni at 60° and 500 lb./sq. in. gave 1-ethyl-1-phenyl-2-(3-tropanyl)ethane (XVII), an oil, which formed an HCl salt. XVII (15 g.) similarly treated with 2-cyclohexylethylmagnesium bromide gave 2-cyclohexylethyl 3-tropanylmethyl ketone (XVIII), b0.7 157-64°, n24.5D 1.5010. XVIII (7.7 g.) in 20 ml. Et2O similarly treated with PhLi (from 9.5 g. PhBr) in Et2O at 0°, gave 1-(2-cyclohexylethyl)-1-phenyl-3-tropaneethanol (XIX), m. 104-6° (EtOAc). XIX (0.5 g.), 1 ml. H2, 3 ml. AcOH, and 0.13 g. red Pd-C refluxed 3.5 hrs., the soln. filtered, the filtrate dild. with H2O, the crude HCl salt sepd. as an oil and crystd. gave 1-(2-cyclohexylethyl)-1-phenyl-2-(3-tropanyl)ethane-HCl, m. 175° (alc.-Et2O). The free base was a colorless oil; HCl salt, m. 198-200°. Similarly, 25 g. XVII reacted with cyclohexylmagnesium bromide to give cyclohexyl 3-tropanylmethyl ketone (XX), b0.9-1.1 142-53°, crystg. to a white solid on standing. XX (10 g.) similarly treated with PhLi gave 1-cyclohexyl-1-phenyl-3-tropaneethanol (XXI), m. 139-40.5° (EtOAc). XXI (1 g.) refluxed 0.5 hr. with AcOH and concd. HCl gave the ethylene salt, m. 195-6°. Hydrolysis gave the free base as an oil. The free base (4.4 g.) hydrogenated over Raney Ni at 500 lb./sq. in. and 60° gave 1-cyclohexyl-1-phenyl-2-(3-tropanyl)ethane, colorless oil; HCl salt, m. 167-8.5°; citrate, m. 153-5°; butiiodide, white solid. N-Isopropylnortropane (16.7 g.), 11.3 g. NCCH2CO2Et, 1.6 g. NH4OAc, 7.3 g. AcOH, 20 ml. alc., and 0.6 g. Pd-C shaken with H at 60 lb./sq. in. and 60°, the residue refluxed 12 hrs. with concd. HCl gave crude 3-(N-isopropylnortropane)-acetic acid-HCl which was esterified with anhyd. MeOH and HCl 3 days at room temp. gave Me 3-(N-isopropylnortropane)acetate (XXII), b0.3 124-7°. XXII (11.3 g.) similarly treated with p-anisylmagnesium bromide gave p-anisyl 3-(N-isopropylnortropanyl)methyl ketone (XXIII), b0.2 160-4° and crystd. as a white solid. XXIII (7.5 g.) similarly treated with PhLi at

L4 ANSWER 13 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

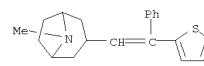


● HCl

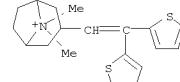
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 CN Tropane, 3-(2,2-di-2-thienylvinyl)- (6CI) (CA INDEX NAME)



RN 102157-42-6 CAPLUS
 CN Tropane, 3- β -2-thienylstyryl- (6CI) (CA INDEX NAME)



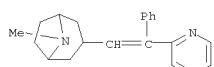
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 CN 3-(2,2-di-2-thienylvinyl)-8-methyltroponium bromide (6CI) (CA INDEX NAME)



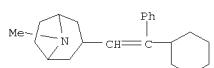
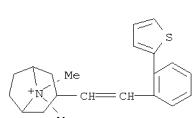
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RN 111979-88-5 CAPLUS
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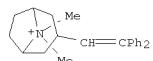
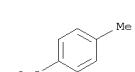
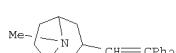
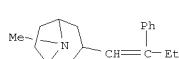
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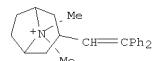
Br-CH3

RN 114402-20-9 CAPLUS
CN Tropane, 3-(β -cyclohexylstyryl)-, hydriodide (6CI) (CA INDEX NAME)● HI
RN 114723-81-8 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 8,8-dimethyl-3-[2-[2-(2-thienyl)phenyl]ethenyl]-, bromide (9CI) (CA INDEX NAME)

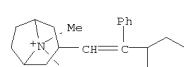
● Br-

RN 118801-08-4 CAPLUS
CN 3-(2,2-Diphenylvinyl)-8-methyltropanium bromide (6CI) (CA INDEX NAME)CM 2
CRN 16722-51-3
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, Tropane, 3-(β -ethylstyryl)-, hydrochloride 102544-88-7P,
Tropane, 3-(β -cyclohexylstyryl)-, hydrochloride 102544-89-8P
, Tropane, 3-(β -cyclohexylstyryl)- 102663-21-8P, Tropane,
3-(2,2-diphenylvinyl)-, hydrochloride 110147-39-2P, Tropane,
3-(β -2-pyridylstyryl)- 113927-52-9P, Nortropane,
8-isopropyl-3-(p-methoxy- β -phenylstyryl)-
RL: PREP (Preparation)
(preparation of)
RN 88543-22-0 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-(2,2-diphenylethenyl)-8-methyl- (CA INDEX NAME)RN 101892-62-0 CAPLUS
CN Tropane, 3-(β -ethylstyryl)-, hydrochloride (6CI) (CA INDEX NAME)

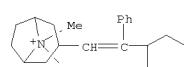
● HCl

RN 102544-88-7 CAPLUS
CN Tropane, 3-(β -cyclohexylstyryl)-, hydrochloride (6CI) (CA INDEX NAME)

● Br-

RN 119040-93-6 CAPLUS
CN 3-(β -Cyclohexylstyryl)-8-methyltropanium bromide (6CI) (CA INDEX NAME)

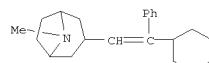
● Br-

RN 124111-32-6 CAPLUS
CN 8-Butyl-3-(β -cyclohexylstyryl)tropanium iodide (6CI) (CA INDEX NAME)

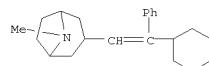
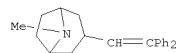
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RN 124138-73-4 CAPLUS
CN 3-(2,2-Diphenylvinyl)-8-methyltropanium p-toluenesulfonate (6CI) (CA INDEX NAME)

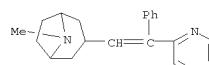
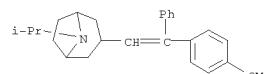
CM 1

CRN 124138-73-3
CNMF C23 H28 N

● HCl

RN 102544-89-8 CAPLUS
CN Tropane, 3-(β -cyclohexylstyryl)- (6CI) (CA INDEX NAME)RN 102663-21-8 CAPLUS
CN Tropane, 3-(2,2-diphenylvinyl)-, hydrochloride (6CI) (CA INDEX NAME)

● HCl

RN 110147-39-2 CAPLUS
CN Tropane, 3-(β -2-pyridylstyryl)- (6CI) (CA INDEX NAME)RN 113927-52-9 CAPLUS
CN Nortropane, 8-isopropyl-3-(p-methoxy- β -phenylstyryl)- (6CI) (CA INDEX NAME)

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 L3 116 S L1 FULL

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 L4 13 S L3 FULL

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